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ABSTRACT

Although much of leadership research has been done in social or human organizations other than schools, it can be applied to educational institutions and to vocational education. Both the individual dimensions of leadership (psychological) and the group or organizational dimensions of leadership (sociological) must be considered, and also the interaction between the two. Implicit in most leadership research has been the idea that the effective leader is high in both initiating structure (goal achievement) and consideration (group maintenance) behaviors. The vocational teacher of the future must become more competent in organizing and directing the learning environment and in using educational technology, and the teacher must have many of the same leadership skills and competencies needed by administrators and supervisors. There is considerable evidence to support the idea that the quality of local programs of vocational and technical education is dependent on competent administrative leadership. The Federal leadership role in vocational education over the years has shifted now to the State and local level, and often the new breed of local administrator needs to assume the role of change agent in his schools and communities. (EA)

Graduate School Lecture
The Ohio State University
Columbus, Ohio
May 22, 1974

LEADERSHIP DEVELOPMENT IN VOCATIONAL EDUCATION
Professor Ralph C. Wenrich
The University of Michigan

When Dr. McCracken invited me to your campus for this occasion, I asked if I would be expected to relate my comments specifically to agricultural education; he indicated that the interests of the group would be broad and that I might expect to have in my audience representatives of all the major fields of vocational education. You may know that I come from an institution which has no agricultural education, as such. But neither do we have a business education program, as such. Nor a trade and industrial or a health occupations program. But we do have what we think is a truly "comprehensive" vocational and technical teacher education program which, incidentally, was based on the research done on this campus by Dr. Cotrell and others. I should hasten to add, the field of agriculture is well represented on our staff for this comprehensive program by Dr. Dan Vogler, as is the health occupations field by Ms. Madge Attwood; trade and industrial education by Drs. McMahon and Odbert, and business education by Dr. Brown.

To come to The Ohio State University campus to discuss leadership is like carrying coals to New Castle. In the first place, much of the early research on leadership (to which I will refer later) was done on this campus by Stogdill and others;

furthermore, The Center for Vocational and Technical Education (located on this campus) is a center for "Research and Leadership Development." At the risk of being considered presumptuous, I would like to point out that The University of Michigan has a pretty good record, too, for research in the area of leadership; through the Institute for Social Research at the U of M, and the work of researchers like Katz and Kahn, Cartwright and Zander, Likert, Seashore, Bowers, Mann, and Tannenbaum, we have learned a great deal about leadership in organizations. While much of this research was done in social or human organizations other than schools, it can be applied to educational institutions and to vocational education.

Definition of Terms

"Leadership development in vocational education" is the topic for consideration today.

Vocational education is defined as specialized education which takes place in educational institutions --secondary and post-secondary--and is designed to prepare the learner for entry into or advancement in employment. We are therefore concerned with leadership in organizations such as comprehensive high schools, vocational high schools, area vocational schools and centers, technical institutes, comprehensive community colleges and in colleges with occupational programs which do not lead to a baccalaureate degree.

Leadership can be defined in popular terms; for example, Webster defines a leader as "a person or animal that goes before

to guide or show the way, or one who precedes or directs in some action, opinion, or movement." Ordway Tead, the author of The Art of Leadership, says, "Leadership is the activity of influencing people to cooperate towards some goal which they come to find desirable." Katz and Kahn consider the essence of organizational leadership to be that "influential increment over and above mechanical compliance with the routine directives of the organization."

One need not read much of the literature on leadership to discover that you can't distinguish leaders from non-leaders on the basis of personality characteristics or traits. That is, a person might be trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean and reverent and still not be a leader.

It is not often that I find it necessary, or even desirable, to quote Admiral Rickover in order to make a point, but in this instance I find him helpful. In congressional testimony given sometime ago he got off this lampoon of the military habit of defining leadership by certain rules of conduct. Said Rickover,

What are these rules? You are not supposed to have a soup spot on your blouse; Abraham Lincoln had a lot of soup spots. You are not supposed to drink; Ulysses S. Grant drank. You are not supposed to run around with women; Napoleon ran around with women. Such rules (said Rickover) are not the basic elements of leadership. There is much more to it than that.

Cartwright and Zander point out one of the problems in defining leadership:

To some leadership is a property of a group while to others it is a characteristic of an individual. To those who emphasize the group, leadership may be synonymous with prestige, with the holding of an office, or with the performance of activities important to the group. To those who stress the individual, however, leadership may mean the possession of certain personality characteristics such as dominance, ego-control, aggressiveness, or freedom from paranoid tendencies, or it may mean the possession of certain physical characteristics such as tallness, or an impressive physiognomy.

The literature on research done by psychologists and sociologists on the subject of leadership suggests that neither discipline alone can adequately explain leadership. That is, both the individual dimensions of leadership (psychological) and the group or organizational dimensions of leadership (sociological) must be considered together. Most of the recent studies of leadership do indeed consider both the individual and the organizational dimensions and the interaction between the two. Gibb recognized the complexity of the concept when he stated,

Any comprehensive theory of leadership must incorporate and integrate all of the variables which are now known to be involved, namely (1) the personality of the leader, (2) the followers with their attitudes, needs, and problems, (3) the group itself both as regards to (a) structure of inter-personal relations, and (b) syntality characteristics, (4) the situation as determined by physical setting, nature of task, etc. Furthermore, any satisfactory theory must recognize that it will not be these variables per se which enter into the leadership relation, but that it is the perception of the leader by himself and by others and the shared perception by leaders and others of the group and the situation with which we have to deal.

What appears to be one of the more useful approaches to research on leadership is a series of studies focusing

upon leadership behavior in organizational environments.

Leadership Behavior

Many of the studies of leadership behavior have resulted from and are based upon the work of Stogdill and others who have been associated with the Personnel Research Board at The Ohio State University. A study by Halpin of school superintendents and another by Everson of high school principals revealed that effective or desirable leadership behavior was characterized by high scores on two dimensions of leader behavior which were designated "initiating structure" and "consideration". Initiating structure was defined as the leader's behavior in delineating the relationships between himself and the members of his work group, and in establishing clear organizational goals, communication channels and procedures for accomplishing group tasks. Consideration was defined as the leader's behavior indicative of friendship, mutual trust, respect and warmth in the relationships between the leader and group members.

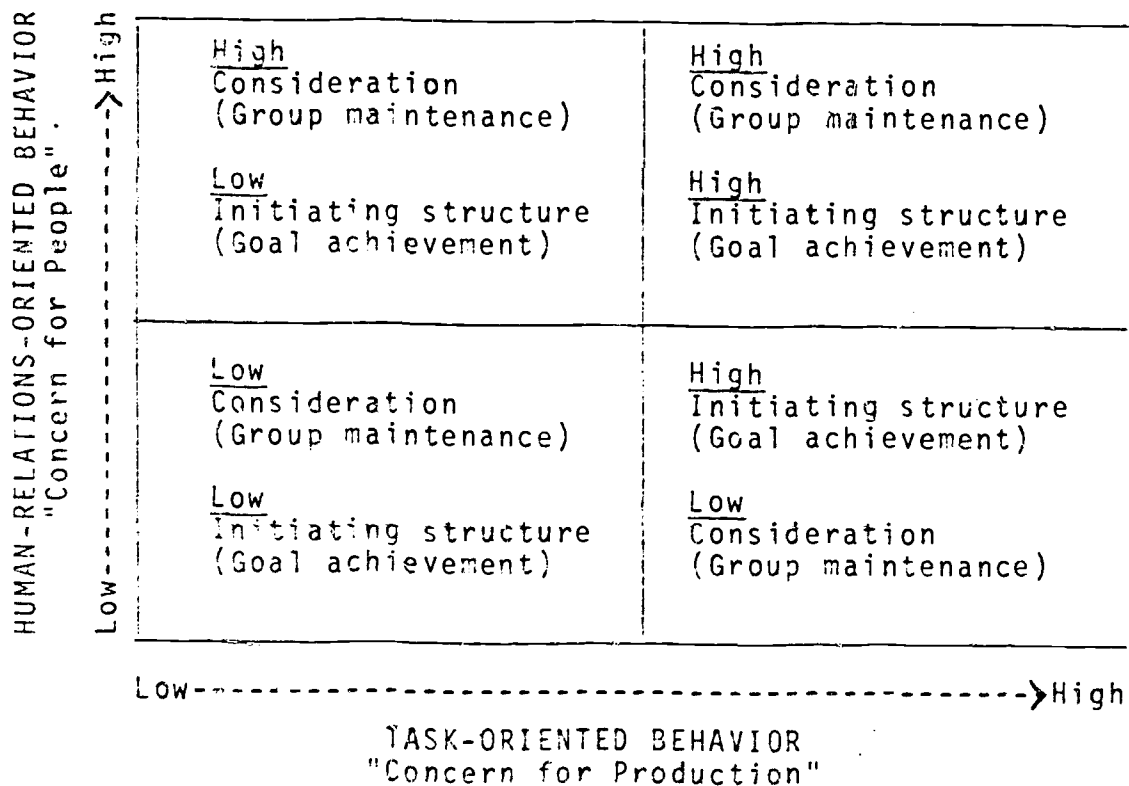
The Survey Research Center at The University of Michigan has also been involved in studies dealing with organizational leadership; even though this research was done in work organizations other than schools, it may be equally applicable to schools. Cartwright and Zander have pointed out that most group objectives may be accomplished under the two headings of "goal achievement behaviors" and "group

maintenance behaviors." The kinds of leadership behavior directed toward goal achievement are: (1) initiates action, (2) keeps members attention on the goal, (3) clarifies the issue, (4) develops a procedural plan, (5) evaluates the quality of work done, and (6) makes expert information available. The types of leadership behavior which exemplify group maintenance include: (1) keeps interpersonal relations pleasant, (2) arbitrates disputes, (3) provides encouragement, (4) gives the minority a chance to be heard, (5) stimulates self-direction, and (6) increases the interdependence among members.

While Halpin and Everson did their research in the school setting and Cartwright and Zander did their research with small non-formal groups it is interesting to note the similarity in their findings.

Katz and Kahn also at The University of Michigan identify two major modes of behavior among supervisors in business and industry. They claim that some supervisors are production-oriented while others are employee-oriented. Employee-oriented supervisors focus primarily on employee motivation, satisfaction of employee needs, and the building of employee morale. Production-oriented supervisors, on the other hand, emphasize increased efficiency, greater production, and institutional goal attainment.

The studies done at The Ohio State University found that initiating structure and consideration were separate and distinct dimensions. The fact that a person is high in one dimension does not necessarily mean that he will be high or low in the other. The behavior of a leader can be described as any mix of both dimensions. To show this relationship, leader behavior was plotted on two separate axes rather than on a single continuum. Four quadrants were used to show various combinations of initiating structure (task-oriented behavior) and consideration (human-relations-oriented behavior). The following figure illustrates these relationships.



Blake and Mouton have popularized the concepts which have grown out of the Ohio and Michigan studies in The Managerial Grid. In their graphic presentation, "concern for production" forms the horizontal axis while "concern for people" is shown on the vertical axis. Production becomes more important to the leader as his rating advances on the horizontal scale, while people become more important to the leader as his rating progresses on the vertical axis.

Implicit in most of the research reported above is the idea that the most effective leader is the person who is high on both dimensions of leadership behavior which have been identified in the Ohio and Michigan studies--initiating structure (goal achievement) and consideration (group maintenance). But other researchers, most notably Likert, suggest that the ideal and most productive leader behavior, for industry at least, is employee centered, or what Likert would call participatory. Likert developed the principle of supportive relationships which provides a formula for obtaining the full potential of every major motive which can be harnessed in a work situation. He stated the principle as follows:

The leadership and other processes of the organization must be such as to insure a maximum probability that in all interactions and all relationships with the organization, each member will, in the light of his background, values, and expectations view the experience as supportive and one which builds and maintains his sense of personal worth and importance.

The relationship between the superior and subordinate should be one which is supportive and ego-building. To the extent that the superior's behavior is ego-building rather

than ego-deflating, his behavior would have a positive effect on organizational performance. But the superior's behavior must be perceived as supportive by his subordinates as viewed in the light of the subordinates' values, background and expectations. The subordinates' perception, rather than that of the superordinate, determines whether or not a particular experience is indeed supportive.

The Likert research also provides a rationale for the concept of team or group decision-making and supervision. In the traditional organization, the interaction is on a one-to-one basis between the superordinate and the subordinate, but in Likert's "System Four" type of management, the interaction and decision-making relies heavily on group process.

Leadership and Organizational Effectiveness

Fiedler has studied leadership in the organizational context in relation to organizational effectiveness. He defines leadership as a problem of "influencing and controlling others" and leadership effectiveness must therefore be measured on the basis of the performance of the leader's group. He takes the position that different situations require different leadership; that is, the same leadership style or the same leader behavior will not be effective in all situations. He accepts the two major modes of behavior identified by leadership research which may be characterized by such terms as (1) "task oriented" or "initiating structure," and (2) "people-oriented" or "consideration." Both of these modes of leader behavior

have been effective in some situations and not in others. Fiedler identifies three major situational factors which determine whether a leader will find it easy or difficult to influence his group; (1) the degree to which the group accepts and trusts its leader, (2) the leader's position power, that is the power which the organization rests in the leadership position, and (3) the degree to which the task of the group is structured or unstructured. But these factors by themselves do not determine group performance. Just as there is no one style of leadership which is effective for all groups, so there is not one type of situation which makes an effective group. According to Fiedler, liked leaders do not, on the average, perform more effectively than do disliked leaders; and powerful leaders do not perform better than leaders with low position power. Effective group performance, then, requires the matching of leadership style with the appropriate situation. Fiedler has worked out a system for classifying situations as to how much influence the situation provides the leader and then matching the situation with the style of leadership required. Fiedler and others who have worked with this Contingency Model of Leadership Effectiveness have concluded that the effectiveness of the leader depends on the favorableness of the group as well as on his own particular style of leadership. For example, task-oriented leaders

perform best in very favorable and very unfavorable situations, while the human relations oriented leaders perform best in the intermediate situations. The training of persons for leadership roles can be effective according to Fiedler, "only if it teaches the individual to diagnose the situation correctly and then either modify his leadership style to fit the situation or modify the situation to fit his leadership style."

Leadership and Power

One of the characteristics of leadership in managerial or supervisory roles is that leaders exercise power. Power is generally defined as the capacity to influence the behavior of others. It is important to differentiate between position power and personal power. The mere fact that an individual occupies an official position in a work organization may at the same time give him certain authority or power. An individual might also have power because of his personal influence over the behavior of others. Therefore, one individual who is able to induce another individual to do a certain job, because of his position in the organization, is considered to have position power, while an individual who derives his power from his followers is considered to have personal power. Obviously many individuals have both position and personal power. Position power tends to be delegated down through the organization, while personal

power is generated upward from below through follower acceptance. The effective leader will tend to influence the group through the use of his personal power. He will use the power and authority of his official position most judiciously.

Leadership and Administration

Although most of the research described above was concerned with leadership behavior in administrative or management roles it should not be assumed that there is a one-to-one relationship between leadership and administration. In any large formal organization, such as a school or school system, a person might hold an administrative position but exercise little or no leadership. Conversely, not all leaders in school organizations are in administrative and/or supervisory positions. To exercise leadership one need not hold a position of authority in the administrative or supervisory hierarchy of the school. In fact, anyone occupying a role in the school or school system in which he has some responsibility for managing the environment also has in that position the opportunity to exercise leadership. Not the least of these roles is that of teacher.

The vocational teacher of the future must be more competent in organizing and directing the learning environment and in using the educational technology. He must play the role of manager of the instructional unit for which he is

responsible, whether that be conducted in a shop, laboratory, or a classroom. He must be able to create and maintain a learning environment in which youth and adults can develop the competencies needed for employment. In this respect the teacher must have many of the same leadership skills and competencies needed by persons in other managerial roles such as administrators and supervisors.

Although our experience in leadership development has been centered on the preparation of persons for leadership roles in administration of vocational and technical education, I believe what we have learned is applicable to a wide range of functionaries needed in the management of vocational education, including teachers, or, if you will, instructional managers, department heads, supervisors, coordinators, directors, principals and deans.

The Need for Leadership in Administration of Vocational Education

There is considerable evidence to support the idea that the quality of local programs of vocational and technical education is dependent upon competent administrative leadership--persons who have those insights, understandings and skills which enable them to identify needs and to bring together and effectively use the school and community resources (both physical and human) in the development of dynamic programs to meet these needs. Where such leadership

is provided other essential ingredients of effective programs--qualified teachers, well-equipped shops and laboratories, adequate financial support and active community involvement--generally follow.

The Panel of Consultants on Vocational Education in their report, Education for a Changing World of Work (1963), recognized the need for administrative leadership.

The leadership of vocational education will determine both its quality and effectiveness. In a rapidly changing world, this leadership must be dynamic and forward-looking, and able to adapt its thinking to the constantly changing situation which it faces. Capable leadership is always in short supply, especially in the new fields.

The general report of the Advisory Council on Vocational Education titled Vocational Education--The Bridge Between Man and His Work (1968) stated:

Prior to the Vocational Education Act of 1963, leadership activities had received only token attention nationwide. It was left to the old theory that "the cream will rise to the top" to supply part of the need for leadership, but suddenly the demand for sophisticated personnel in leadership positions made the old practice unsatisfactory and new catalysts were needed.

The University of Michigan, beginning in 1964, served as a catalyst for the preparation of a new breed of local administrators who could give leadership to the development of comprehensive programs on the secondary and community-college level and who would also assume the role of change agent in their schools and communities.

Vocational education in the United States, unlike

general education, was initiated largely on the basis of a national concern. When the Smith-Hughes Act was passed in 1917 there was very little evidence of concern about or interest in vocational education on the part of local educational leaders. It was to be expected, therefore, that the leadership for the development of vocational education emanated from the national level, then to the states, and subsequently to the development of programs at the local level. This pattern of operation continued and was reinforced through amendments to the Smith-Hughes Act until the passage of the Vocational Education Act of 1963. The 1963 act gave support to the idea of placing more responsibility on the state, and through the states, on the local community.

Unfortunately, after forty-five years of federal leadership, the states and local communities were either not ready or not willing to accept the leadership responsibility for vocational education; they continued to look to Washington for leadership. Then came the 1968 Amendments to the 1963 act which gave states and local communities more responsibility for program planning and evaluation. The federal leadership role was shifted with more emphasis on administrative and statistical responsibilities and the programming role was given to the states, with a high degree of local involvement made mandatory.

This shift in responsibility from the federal to state and local units of administration creates a need for an increased number of local vocational education leaders who have the competence to plan, operate and evaluate vocational programs on the secondary and post-secondary levels.

Leadership Development

Leadership development cannot be achieved in abstract or general terms because there is no single type or style of leadership behavior which works best in any and all situations. Since leadership is situational, any leadership development program should be designed to prepare persons to function in a particular role in vocational and technical education. For example, our leadership development program at the University of Michigan is aimed at preparing people for administrative positions in local K-12 school districts and in community colleges where they will have across-the-board responsibility for the total program of vocational and/or technical education; we are not interested in training persons for leadership roles as supervisors of any one area of vocational education, such as business or industrial education. We recruit vocational teachers from all fields--agriculture, home economics, business, industrial and health occupations--from both the secondary and post-secondary levels. Since we expect our trainees to be qualified for administration of comprehensive programs, we

start the developmental process by helping this group of twenty persons, with widely different backgrounds of education and experience, come to understand the characteristics of a total program of vocational and technical education. Parenthetically, it should be stated that we try to screen out the person who is so emotionally attached to his own area of specialization that he might find it difficult to set aside his "first love" while he becomes more knowledgeable about and involved in other areas of vocational education. On the other hand our recruitment efforts are directed toward those individuals who have a commitment to vocational education. We think a leader should show some enthusiasm for his area of responsibility if he is expected to convey to others the idea that the work in which they are engaged is important.

The variables in organizational leadership have been identified and defined by numerous researchers. Floyd Mann proposed a framework for organizational leadership that centers on the idea of different skill requirements for different organizational levels and different organizational time periods. No single skill or cluster of skills is of over-riding importance; rather it is the "skill mix" that counts. The four categories of skills identified by Mann are: (1) technical skills (2) administrative skills (3) human relations skills, and (4) institutional skills. At the lower levels in an organization, technical skills are seen as most important so the ideal mix is

composed of technical, human relations and administrative skills, in that order. As one moves up the hierarchy, administrative skills increase in importance, and institutional skills (skills involved in relating the organization to its environment, both internally and externally) enter the picture. At the top, the ideal skill mix is strong on institutional and administrative skills; technical and human relations skills are relatively less important at the top level because theoretically, motivation is less of a problem at that level. A minimum of competence is seen as necessary in each area at all levels, but it is the relative mix that counts. In addition to level, the skill mix, according to Mann's model, varies depending upon where the organization is in its life-cycle. That is, different combinations of skills are needed during times of change as compared with times of stability.

Bowens and Seashore, after reviewing the research on leadership done at Ohio State and Michigan concluded that the multitude of administrative and supervisory behaviors studied at these two institutions can be organized into four basic dimensions of leadership; they are (1) support, (2) goal emphasis (3) interaction facilitation and (4) work facilitation. Support is behavior which enhances someone else's feeling of personal worth and importance. Goal emphasis is behavior which stimulates an enthusiasm

for meeting the group's goals or achieving excellent performance. Interaction facilitation is behavior which encourages members of the group to develop and maintain close, mutually satisfying relationships." Work facilitation is behavior which helps goal attainment by such activities as scheduling, coordinating, planning and by providing resources such as tools, materials, and technical knowledge. Bowens and Seashore conclude that these four dimensions of leadership, even though developed initially to describe formal (position) leader behavior, appeared to be equally applicable to the description of leadership by members of the group. Furthermore, they claim that group members do engage in behavior which can be described as leadership and that in these groups it appears likely "that the total quality of peer leadership is at least as great as the total quality of supervisory leadership."

Katz and Kahn view social organizations as open social systems because they are "acutely dependent upon their external environments." Katz and Kahn define leadership "as any act of influence on a matter of organizational relevance" but to distinguish leadership from routine administration they speak of the "influencial increment" over and above simple compliance with the directives of the organization. They stress the value of non-organizationally decreed bases of influence. That is referent power (or influence)

and expert power, both of which depend upon the behavior of a leader as a person rather than as an occupant of a position, are seen as valuable adjuncts to, if not replacements for, reward and punishment and legitimate authority.

Katz and Kahn suggest that there is a cognitive and affective requirement for each of three different types or levels of leadership.

1. Origination (the creation, change and elimination of structure),
2. Interpolation (supplementing and piecing out structure, and
3. Administration (using structure as it already exists).

These three types correspond roughly to the top, middle, and bottom levels in an organization. In each of these levels of leadership, they suggest that there is a cognitive and an affective requirement. These requirements are described as follows.

Types of Leadership	Cognitive Requirements	Affective Requirements
Origination	Systemic Perspective	Charisma
Interpolation	Subsystem Perspective	Integration of Primary and Secondary Relationships
Administration	Technical knowledge of job. Knowledge of organizational rules	Concern with equity and fairness

Systemic perspective according to Katz and Kahn, is the cognitive requirement for the highest pattern of leadership. It involves an awareness of the organization's relationship to its environment--its impact on society and other institutions--changes in markets, long-range objectives, etc. It also includes an awareness of the interrelationships among organizational subsystems and the ability to manipulate organizational structure by changing it or creating new structure. Establishing and changing overall organizational policies are a part of systemic perspective. In general, it is quite similar to the institution skill concept of Mann's "skill mix" approach.

Charisma is the affective requirement of top level leadership. It is the magical aura surrounding the leader that separates him (but not entirely) from the membership. It stems from satisfying the dependency needs of the followers through dramatic acts of leadership which further endow the leader with extra-ordinary qualities. Typically, immediate subordinates are much less subject to charisma than are followers more removed from the leader.

Subsystem perspective is the middle level cognitive requirement that makes workable the policy directives from above and relates independent subsystems to each other. It requires both an upward and a downward orientation. To exercise subsystem perspective effectively, the manager must

be both a good problem solver, a good coordinator, and influential with both his superiors and his subordinates.

Integration of primary and secondary relationships is an affective requirement of middle level leadership. It involves the practice of good human relations in concert with organizational objectives. It strives to make the performance of organizational roles personally meaningful by bringing the individual needs and job goals and activities closer together. It recognizes the importance of interpersonal relationships and may build groups which provide social-psychological rewards while they perform organizational tasks.

Technical knowledge of job and knowledge of organizational rules are cognitive requirements for the bottom level of leadership. Technical skills are necessary for adequate direction of the group's tasks while knowledge of the organization's legal system is necessary (but not sufficient) for insuring order and compliance on the part of the workers.

Concern with equity and fairness, an affective requirement of the bottom level of leadership, suggests that simple knowledge of the rules is not enough. They must be applied fairly, with recognition that the rules do exist and should be followed, but also with recognition that situations do arise when literal interpretations are inappropriate and the individual context must be considered.

We have looked at a sampling of the research on leadership done by a number of social scientists; our purpose was to identify and define those variables in leadership behavior which appear to be significant. A more extensive search could (and should) be made which might include the work of Getzels and Guba, Likert, McGregor and others. But perhaps, for the purpose of this seminar, the concepts which have been identified will be sufficient.

During the discussion period we might want to further explore these research findings. We might also want to make more specific the application of these concepts to leadership roles in vocational education.

SUMMARY

A person to be a leader must have the capacity to "live ahead" of his colleagues and his institution; to interpret his institution's needs to the public and the public's needs to his institution; and to conceive and implement strategies for effecting changes required for his institution to fulfill its purpose. The leader in administrative roles tends to have a stimulating, prodding and sometimes even disruptive influence. He tends to emphasize creative planning, initiative and future-facing boldness.

The effective leader tends to engage in the following behaviors:

1. He helps others to accept common goals. The leader must himself be enthusiastic about what he is doing and bring other members of the group to accept "the cause."
2. He initiates productive action in group situations. He realizes that he is effective to the extent that he can influence the behavior of others, but perhaps more important, he initiates the action. That is he provides an atmosphere or set of conditions in which things will happen. He motivates the group to act and then makes available to them the resources necessary to get things done.
3. He establishes clear plans and work procedures. Once a goal has been accepted and action has been decided upon, the leader must chart the course and set the ground rules.
4. He maintains warm relationships with members of the group. While the leader must be goal-oriented, he must also be people-oriented. He can hope to accomplish the goals only through the active and constructive involvement of the members of the group.

5. He gets commitment and cooperation from those with whom he works. He does this through persuasion rather than through threat or force (such as using the authority of his official position). He also realizes that he must have the cooperation of groups outside the school; the schools cannot do the job alone.
6. He effects change and builds structures for the achievement of meaningful purposes. He is basically an innovator and should be a student of how change is achieved. He must be careful however, not to encourage change solely for the sake of change.

REFERENCES

- Blake, Robert and Mouton, Jane. The Management Grid. Houston, Texas: Gult Publishing Company, 1964.
- Bowers, D. G. and Seashore, S. E. "Predicting Organizational Effectiveness With a Four-Factor Theory of Leadership." Paper read at International Congress of Applied Psychology, Ljubljana, Yugoslavia, August, 1964. Administrative Science Quarterly, 1966, Vol. II, pp. 238-263.
- Cartwright, Darwin and Zander, Alvin (eds.). Group Dynamics; Research and Theroy. Evanston, Illinois: Row, Peterson and Company, 1960.
- Cribbin, James J. Effective Managerial Leadership. New York: American Management Association, 1972.
- Everson, Warren L. "Leadership Behavior of High School Principals," National Association of Secondary School Principals Bulletin. NASSP, National Education Association, XLIII (September, 1959).
- Fiedler, Fred E. A Theory of Leadership Effectiveness. New York: McGraw-Hill Book Company, 1967.
- Gibb, Cecil A. "Leadership," in Handbook of Social Psychology, Gardner Lindzey (ed.). Cambridge, Mass.: Addison Wesley Publishing Company, 1954. pp. 877-920.
- Halpin, Andrew W. The Leadership Behavior of School Superintendents. Chicago: Midwest Administration Center, University of Chicago, 1960.
- Katz, Daniel and Kahn, Robert. The Social Psychology of Organizations. New York: John Wiley, 1966.
- Likert, Rensis. The Human Organization. New York: McGraw-Hill Book Company, 1967.
- Wenrich, Ralph C. "Professional Development and Leadership Roles," in Contemporary Concepts in Vocational Education, First Yearbook of the American Vocational Association, Gordon Law (ed.). Washington, D.C.: American Vocational Association, 1971.
- Wenrich, Ralph C. and Wenrich, J. William. Leadership in Administration of Vocational and Technical Education. Columbus, Ohio: Charles E. Merrill Publishing Co., 1974.